



MASTER CATALOG 2018

VOLUME TWO | **ROTATING TOOLS**



HOLEMAKING | TAPPING | SOLID END MILLING | INDEXABLE MILLING

➤ G0mill™ GP General Purpose Solid Carbide End Mills • 4 Flute

Primary Application

G0mill GP system offers plunging, slotting, and profiling with long tool life in a wide range of workpiece materials. These end mills are designed to provide high Metal Removal Rates (MRR) and to achieve good surface quality at an excellent cost-benefit ratio. A wide range of diameters and lengths are available with chamfered edge and ball nose as stocked standard.

- Roughing and finishing with one tool.
- Excellent cost-benefit ratio.
- Multilayer KC633M™ grades for long tool life.



Features and Benefits

Advanced Technology

- Roughing and finishing with one tool reduces tool changes and unnecessary tooling inventory.
- Eccentric relief increases edge stability for longer tool life and better surface quality.
- Eccentric relief eases regrinding and reduces reconditioning cost.
- 4-flute design for high MRR and reduced machining time.

Tailored Grades

- Universal multilayer KC633M coating for cutting steel, cast iron, and stainless steel (wet).

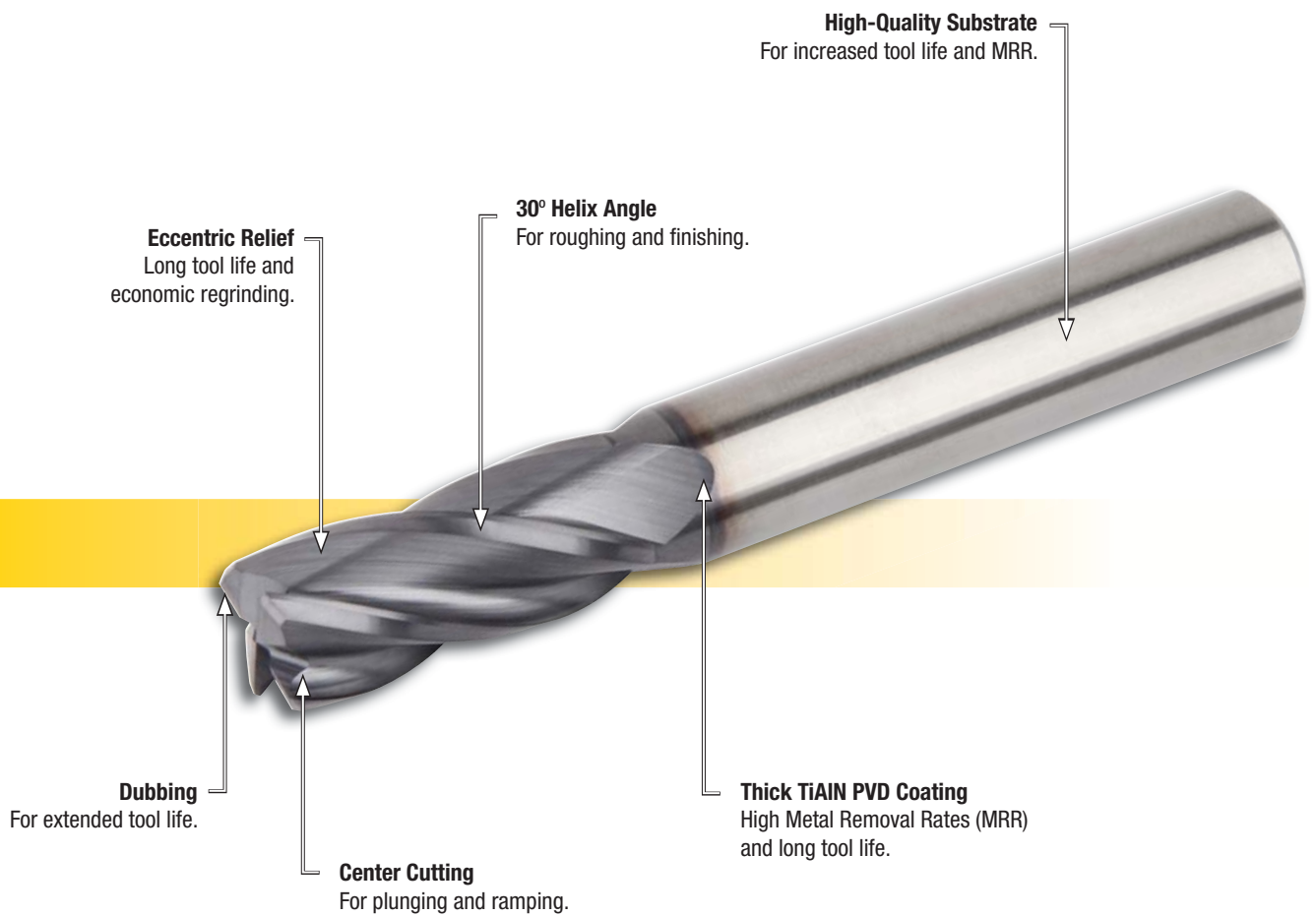
Customization

- Intermediate diameters available.

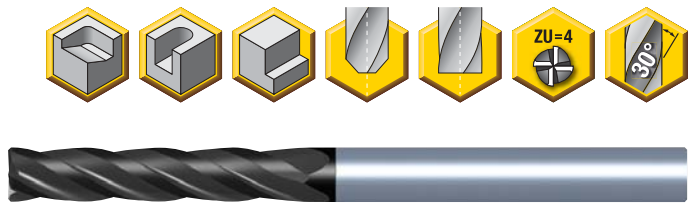
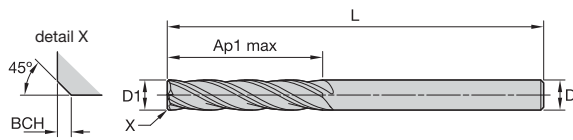
Extensive Standard Offering

- Diameter range 1/64–1".
- Sharp edge, chamfer edge, and ball nose as standard offering.

Designed for roughing and finishing with one tool at a value price.



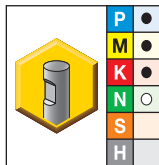
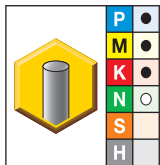
- Center cutting.



End Mill Tolerances

D1	tolerance	D	tolerance h6
All	+0.000/- .002"	≤1/8"	+0/-0.00024"
		>1/8-1/4"	+0/-0.00031"
		>1/4-3/8"	+0/-0.00035"
		>3/8-23/32"	+0/-0.00043"
		>23/32-1 3/16"	+0/-0.00051"

■ 4SE-4CH..IS-IR-IL-IX • 4 Flute • Inch



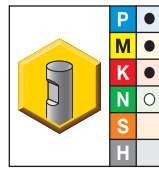
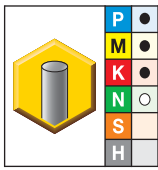
- first choice
- alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
4SE0015IR003A	—	1/64	1/8	1/32	1 1/2	—
4SE0031IR008A	—	1/32	1/8	5/64	1 1/2	—
4SE0062IR010A	—	1/16	1/8	7/64	1 1/2	—
4SE0078IR018A	—	5/64	1/8	3/16	1 1/2	—
4SE0093IR037A	—	3/32	1/8	3/8	1 1/2	—
4SE0093IL062A	—	3/32	1/8	5/8	2	—
4SE0109IR037A	—	7/64	1/8	3/8	1 1/2	—
4CH0125IS025A	—	1/8	1/8	1/4	1 1/2	.010
4SE0125IS025A	—	1/8	1/8	1/4	1 1/2	—
4CH0125IR050A	—	1/8	1/8	1/2	1 1/2	.010
4SE0125IR050A	—	1/8	1/8	1/2	1 1/2	—
4CH0125IL075A	—	1/8	1/8	3/4	2 1/4	.010
4SE0125IL075A	—	1/8	1/8	3/4	2 1/4	—
4CH0125IX100A	—	1/8	1/8	1	3	.010
4SE0125IX100A	—	1/8	1/8	1	3	—
4CH0140IR056A	—	9/64	3/16	9/16	2	.010
4SE0140IR056A	—	9/64	3/16	9/16	2	—
4CH0156IR056A	—	5/32	3/16	9/16	2	.010
4SE0156IR056A	—	5/32	3/16	9/16	2	—
4CH0187IR062A	—	3/16	3/16	5/8	2	.010
4SE0187IR062A	—	3/16	3/16	5/8	2	—
4CH0187IS075A	—	3/16	3/16	3/4	1 1/2	.010
4SE0187IS075A	—	3/16	3/16	3/4	1 1/2	—
4CH0187IL075A	—	3/16	3/16	3/4	2 1/2	.010
4SE0187IL075A	—	3/16	3/16	3/4	2 1/2	—
4CH0187IX112A	—	3/16	3/16	1 1/8	3	.010
4SE0187IX112A	—	3/16	3/16	1 1/8	3	—
4CH0203IR062A	—	13/64	1/4	5/8	2 1/2	.016
4SE0203IR062A	—	13/64	1/4	5/8	2 1/2	—
4CH0218IR043A	—	7/32	1/4	7/16	2	.016
4SE0218IR043A	—	7/32	1/4	7/16	2	—
4CH0218IL062A	—	7/32	1/4	5/8	2 1/2	.016

(continued)

General Purpose Solid Carbide End Mills

(4SE-4CH..IS-IR-IL-IX • 4 Flute • Inch — continued)

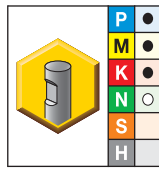
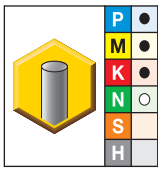


● first choice
 ○ alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
4SE0218IL062A	—	7/32	1/4	5/8	2 1/2	—
4CH0234IR075A	—	15/64	1/4	3/4	2 1/2	.016
4SE0234IR075A	—	15/64	1/4	3/4	2 1/2	—
4CH0250IS050A	—	1/4	1/4	1/2	2	.016
4SE0250IS050A	—	1/4	1/4	1/2	2	—
4CH0250IR075A	—	1/4	1/4	3/4	2 1/2	.016
4SE0250IR075A	—	1/4	1/4	3/4	2 1/2	—
4CH0250IL112A	—	1/4	1/4	1 1/8	3	.016
4SE0250IL112A	—	1/4	1/4	1 1/8	3	—
4CH0250IX150A	—	1/4	1/4	1 1/2	4	.016
4SE0250IX150A	—	1/4	1/4	1 1/2	4	—
4CH0265IR075A	—	17/64	5/16	3/4	2 1/2	.016
4SE0265IR075A	—	17/64	5/16	3/4	2 1/2	—
4CH0281IR075A	—	9/32	5/16	3/4	2 1/2	.016
4SE0281IR075A	—	9/32	5/16	3/4	2 1/2	—
4CH0296IR081A	—	19/64	5/16	13/16	2 1/2	.016
4SE0296IR081A	—	19/64	5/16	13/16	2 1/2	—
4CH0312IS050A	—	5/16	5/16	1/2	2	.016
4SE0312IS050A	—	5/16	5/16	1/2	2	—
4CH0312IR081A	—	5/16	5/16	13/16	2 1/2	.016
4SE0312IR081A	—	5/16	5/16	13/16	2 1/2	—
4CH0312IL112A	—	5/16	5/16	1 1/8	3	.016
4SE0312IL112A	—	5/16	5/16	1 1/8	3	—
4CH0312IX162A	—	5/16	5/16	1 5/8	4	.016
4SE0312IX162A	—	5/16	5/16	1 5/8	4	—
4CH0328IR100A	—	21/64	3/8	1	2 1/2	.020
4SE0328IR100A	—	21/64	3/8	1	2 1/2	—
4CH0343IR100A	—	11/32	3/8	1	2 1/2	.020
4SE0343IR100A	—	11/32	3/8	1	2 1/2	—
4CH0359IR100A	—	23/64	3/8	1	2 1/2	.020
4SE0359IR100A	—	23/64	3/8	1	2 1/2	—
4CH0375IS062A	—	3/8	3/8	5/8	2	.020
4SE0375IS062A	—	3/8	3/8	5/8	2	—
4CH0375IR100A	—	3/8	3/8	1	2 1/2	.020
4SE0375IR100A	—	3/8	3/8	1	2 1/2	—
4CH0375IL112A	—	3/8	3/8	1 1/8	3	.020
4SE0375IL112A	—	3/8	3/8	1 1/8	3	—
4CH0375IX175A	—	3/8	3/8	1 3/4	4	.020
4SE0375IX175A	—	3/8	3/8	1 3/4	4	—
4CH0390IR100A	—	25/64	7/16	1	2 3/4	.020
4SE0390IR100A	—	25/64	7/16	1	2 3/4	—
4CH0406IR100A	—	13/32	7/16	1	2 3/4	.020
4SE0406IR100A	—	13/32	7/16	1	2 3/4	—
4CH0421IR100A	—	27/64	7/16	1	2 3/4	.020
4SE0421IR100A	—	27/64	7/16	1	2 3/4	—
4CH0437IS100A	—	7/16	7/16	1	2 1/2	.020
4SE0437IS100A	—	7/16	7/16	1	2 1/2	—
4CH0437IR100A	—	7/16	7/16	1	2 3/4	.020
4SE0437IR100A	—	7/16	7/16	1	2 3/4	—
4CH0437IL200A	—	7/16	7/16	2	4	.020
4SE0437IL200A	—	7/16	7/16	2	4	—
4CH0437IX300A	—	7/16	7/16	3	6	.020

(continued)

(4SE-4CH..IS-IR-IL-IX • 4 Flute • Inch — continued)



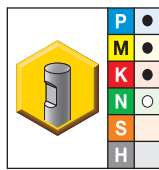
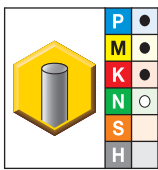
● first choice
 ○ alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
4SE0437IX300A	—	7/16	7/16	3	6	—
4CH0453IR100A	—	29/64	1/2	1	3	.020
4SE0453IR100A	—	29/64	1/2	1	3	—
4CH0468IR100A	—	15/32	1/2	1	3	.020
4SE0468IR100A	—	15/32	1/2	1	3	—
4CH0484IR100A	—	31/64	1/2	1	3	.020
4SE0484IR100A	—	31/64	1/2	1	3	—
4CH0500IS062A	—	1/2	1/2	5/8	2 1/2	.020
4SE0500IS062A	—	1/2	1/2	5/8	2 1/2	—
4CH0500IR100A	4CH0500IR100B	1/2	1/2	1	3	.020
4SE0500IR100A	4SE0500IR100B	1/2	1/2	1	3	—
4CH0500IL200A	4CH0500IL200B	1/2	1/2	2	4	.020
4SE0500IL200A	4SE0500IL200B	1/2	1/2	2	4	—
4CH0500IX300A	—	1/2	1/2	3	6	.020
4SE0500IX300A	—	1/2	1/2	3	6	—
4CH0562IR075A	—	9/16	9/16	3/4	3	.020
4SE0562IR075A	—	9/16	9/16	3/4	3	—
4CH0562IL125A	4CH0562IL125B	9/16	9/16	1 1/4	3 1/2	.020
4SE0562IL125A	4SE0562IL125B	9/16	9/16	1 1/4	3 1/2	—
4CH0562IX225A	—	9/16	9/16	2 1/4	5	.020
4SE0562IX225A	—	9/16	9/16	2 1/4	5	—
4CH0625IS075A	—	5/8	5/8	3/4	3	.020
4SE0625IS075A	—	5/8	5/8	3/4	3	—
4CH0625IR125A	4CH0625IR125B	5/8	5/8	1 1/4	3 1/2	.020
4SE0625IR125A	4SE0625IR125B	5/8	5/8	1 1/4	3 1/2	—
4CH0625IL225A	4CH0625IL225B	5/8	5/8	2 1/4	5	.020
4SE0625IL225A	4SE0625IL225B	5/8	5/8	2 1/4	5	—
4CH0625IX400A	—	5/8	5/8	4	7	.020
4SE0625IX400A	—	5/8	5/8	4	7	—
4CH0687IR137A	—	11/16	3/4	1 3/8	4	.020
4SE0687IR137A	—	11/16	3/4	1 3/8	4	—
4SE0750IS100A	—	3/4	3/4	1	3	—
4CH0750IR150A	4CH0750IR150B	3/4	3/4	1 1/2	4	.020
4SE0750IR150A	4SE0750IR150B	3/4	3/4	1 1/2	4	—
4CH0750IR225A	4CH0750IR225B	3/4	3/4	2 1/4	5	.020
4SE0750IR225A	4SE0750IR225B	3/4	3/4	2 1/4	5	—
4CH0750IL300A	4CH0750IL300B	3/4	3/4	3	6	.020
4SE0750IL300A	4SE0750IL300B	3/4	3/4	3	6	—
4CH0750IX400A	—	3/4	3/4	4	7	.020
4SE0750IX400A	—	3/4	3/4	4	7	—

(continued)

General Purpose Solid Carbide End Mills

(4SE-4CH..IS-IR-IL-IX • 4 Flute • Inch — continued)



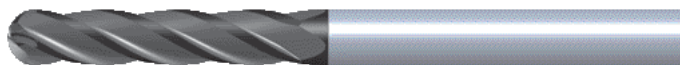
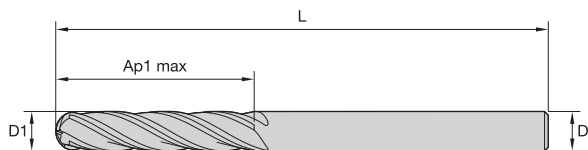
● first choice
 ○ alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
4CH0875IR150A	4CH0875IR150B	7/8	7/8	1 1/2	4	.020
4SE0875IR150A	4SE0875IR150B	7/8	7/8	1 1/2	4	—
4CH0875IL225A	4CH0875IL225B	7/8	7/8	2 1/4	5	.020
4SE0875IL225A	4SE0875IL225B	7/8	7/8	2 1/4	5	—
4CH1000IS150A	—	1	—	1 1/2	4	.020
4CH1000IR225A	4CH1000IR225B	1	—	2 1/4	5	.020
4CH1000IL300A	4CH1000IL300B	1	—	3	6	.020
4CH1000IX400A	—	1	—	4	7	.020
4SE1000IS150A	—	1	1	1 1/2	4	—
4SE1000IR225A	4SE1000IR225B	1	1	2 1/4	5	—
4SE1000IL300A	4SE1000IL300B	1	1	3	6	—
4SE1000IX400A	—	1	1	4	7	—

NOTE: For application data, please see page Q28.



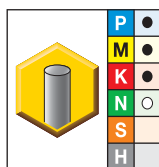
- Center cutting.



End Mill Tolerances

D1	tolerance	D	tolerance h6
All	+.000/- .002"	≤1/8"	+0/- .00024"
		>1/8-1/4"	+0/- .00031"
		>1/4-3/8"	+0/- .00035"
		>3/8-23/32"	+0/- .00043"
		>23/32-1 3/16"	+0/- .00051"

■ 4BN..IS-IR-IL-IX • 4 Flute • Ball Nose • Inch



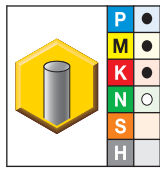
- first choice
- alternate choice

KC633M	D1	D	length of cut Ap1 max	length L
4BN0031IR008A	1/32	1/8	5/64	1 1/2
4BN0047IR012A	3/64	1/8	1/8	1 1/2
4BN0062IR019A	1/16	1/8	3/16	1 1/2
4BN0078IR019A	5/64	1/8	3/16	1 1/2
4BN0094IR019A	3/32	1/8	3/16	1 1/2
4BN0094IL037A	3/32	1/8	3/8	1 1/2
4BN0109IR037A	7/64	1/8	3/8	1 1/2
4BN0125IS025A	1/8	1/8	1/4	1 1/2
4BN0125IR050A	1/8	1/8	1/2	1 1/2
4BN0125IL075A	1/8	1/8	3/4	2 1/4
4BN0125IX075A	1/8	1/8	3/4	3
4BN0141IR056A	9/64	3/16	9/16	2
4BN0156IR056A	5/32	3/16	9/16	2
4BN0172IR062A	11/64	3/16	5/8	2
4BN0187IR031A	3/16	3/16	5/16	1 1/2
4BN0187IL062A	3/16	3/16	5/8	2
4BN0187IX100A	3/16	3/16	1	4
4BN0203IR062A	13/64	1/4	5/8	2 1/2
4BN0219IR062A	7/32	1/4	5/8	2 1/2
4BN0234IR075A	15/64	1/4	3/4	2 1/2
4BN0250IS050A	1/4	1/4	1/2	2
4BN0250IR075A	1/4	1/4	3/4	2 1/2
4BN0250IR112A	1/4	1/4	1 1/8	3
4BN0250IL150A	1/4	1/4	1 1/2	4
4BN0250IX150A	1/4	1/4	1 1/2	6
4BN0281IR075A	9/32	5/16	3/4	2 1/2
4BN0312IS050A	5/16	5/16	1/2	2
4BN0312IR081A	5/16	5/16	13/16	2 1/2
4BN0312IL112A	5/16	5/16	1 1/8	3
4BN0312IX162A	5/16	5/16	1 5/8	4
4BN0344IR100A	11/32	3/8	1	2 1/2
4BN0375IS100A	3/8	3/8	1	2 1/2

(continued)

General Purpose Solid Carbide End Mills

(4BN..IS-IR-IL-IX • 4 Flute • Ball Nose • Inch — continued)



● first choice
 ○ alternate choice

KC633M	D1	D	length of cut Ap1 max	length L
4BN0375IL112A	3/8	3/8	1 1/8	3
4BN0375IR100A	3/8	3/8	1	4
4BN0375IX150A	3/8	3/8	1 1/2	6
4BN0437IR100A	7/16	1/2	1	2 1/2
4BN0500IS100A	1/2	1/2	1	3
4BN0500IR100A	1/2	1/2	1	4
4BN0500IX150A	1/2	1/2	1 1/2	6
4BN0500IR200A	1/2	1/2	2	4
4BN0500IL200A	1/2	1/2	2	4 1/2
4BN0500IX300A	1/2	1/2	3	6
4BN0562IR125A	9/16	9/16	1 1/4	3 1/2
4BN0625IR125A	5/8	5/8	1 1/4	3 1/2
4BN0625IL225A	5/8	5/8	2 1/4	5
4BN0750IR150A	3/4	3/4	1 1/2	4
4BN0750IL300A	3/4	3/4	3	6
4BN0875IR150A	7/8	7/8	1 1/2	4
4BN1000IR150A	1	1	1 1/2	4
4BN1000IL225A	1	1	2 1/4	5

NOTE: For application data, please see page Q29.



■ GOMill GP • 4SE/CH..IS-IR • 4 Flute • Short • Regular

		Side Milling (A) and Slotting (B)		KC633M		Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.																			
		A		B		Cutting Speed – vc SFM		D1 – Diameter																	
Material Group		ap	ae	ap	min	max	inch	1/64	1/32	1/16	5/64	3/32	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1				
								.0156	.0313	.0625	.0781	.0938	.1250	.1875	.2500	.3125	.3750	.5000	.6250	.7500	1.0000				
P	0	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	1	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	2	Ap1 max	0.1 x D	0.5 x D	460	–	620	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	3	Ap1 max	0.1 x D	0.5 x D	390	–	520	IPT	.0001	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045			
	4	Ap1 max	0.1 x D	0.5 x D	300	–	490	IPT	.0001	.0002	.0003	.0004	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039			
M	1	Ap1 max	0.1 x D	0.5 x D	300	–	380	IPT	.0001	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045			
	2	Ap1 max	0.1 x D	0.5 x D	200	–	260	IPT	.0001	.0002	.0003	.0004	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036			
K	1	Ap1 max	0.1 x D	0.5 x D	390	–	490	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	2	Ap1 max	0.1 x D	0.5 x D	360	–	460	IPT	.0001	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045			
N	1	Ap1 max	0.1 x D	0.5 x D	300	–	380	IPT	.0002	.0003	.0006	.0008	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100			
	2	Ap1 max	0.1 x D	0.5 x D	200	–	260	IPT	.0001	.0003	.0005	.0006	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080			
4	Ap1 max	0.1 x D	0.5 x D	390	–	490	IPT	.0001	.0003	.0006	.0007	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090				

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
 Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >1/2" diameter.

■ GOMill GP • 4SE/CH..IL-IX • 4 Flute • Long • Extra Long

		Side Milling (A)		KC633M		Recommended feed per tooth (IPT = inch/th) for side milling (A).																	
		A		Cutting Speed – vc SFM		D1 – Diameter																	
Material Group		ap	ae	min	max	inch	3/32	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1							
							.0938	.1250	.1875	.2500	.3125	.3750	.5000	.6250	.7500	1.0000							
P	0	Ap1 max	0.1 x D	490	–	660	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049						
	1	Ap1 max	0.1 x D	490	–	660	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049						
	2	Ap1 max	0.1 x D	460	–	620	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049						
	3	Ap1 max	0.1 x D	390	–	520	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045						
	4	Ap1 max	0.1 x D	300	–	490	IPT	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039						
M	1	Ap1 max	0.1 x D	300	–	380	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045						
	2	Ap1 max	0.1 x D	200	–	260	IPT	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036						
K	1	Ap1 max	0.1 x D	390	–	490	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049						
	2	Ap1 max	0.1 x D	360	–	460	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045						
N	1	Ap1 max	0.1 x D	820	–	3250	IPT	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100						
	2	Ap1 max	0.1 x D	820	–	2450	IPT	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080						
4	Ap1 max	0.1 x D	820	–	2450	IPT	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090							

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
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 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >1/2" diameter.

■ GOMill GP • 4BN..IS-IR • 4 Flute • Ball Nose • Short • Regular

Material Group																					
	Side Milling (A) and Slotting (B)			KC633M			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.														
	A		B	Cutting Speed – vc SFM			D1 – Diameter														
	ap	ae	ap	min	max	inch	1/32	1/16	5/64	3/32	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1		
P	0	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	1	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	0.5 x D	460	–	620	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	3	Ap1 max	0.1 x D	0.5 x D	390	–	520	IPT	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
M	1	Ap1 max	0.1 x D	0.5 x D	300	–	490	IPT	.0002	.0003	.0004	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039
	2	Ap1 max	0.1 x D	0.5 x D	300	–	380	IPT	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
K	1	Ap1 max	0.1 x D	0.5 x D	390	–	490	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	0.5 x D	360	–	460	IPT	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
N	1	Ap1 max	0.1 x D	0.5 x D	820	–	3250	IPT	.0003	.0006	.0008	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100
	2	Ap1 max	0.1 x D	0.5 x D	820	–	2450	IPT	.0003	.0005	.0006	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080
	4	Ap1 max	0.1 x D	0.5 x D	820	–	2450	IPT	.0003	.0006	.0007	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
 Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >1/2" diameter.

■ GOMill GP • 4BN..IL-IX • 4 Flute • Ball Nose • Long • Extra Long

Material Group																				
	Side Milling (A)			KC633M			Recommended feed per tooth (IPT = inch/th) for side milling (A).													
	A		Cutting Speed – vc SFM			D1 – Diameter														
	ap	ae	min	max	inch	3/32	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1					
P	0	Ap1 max	0.1 x D	490	–	660	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	1	Ap1 max	0.1 x D	490	–	660	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	2	Ap1 max	0.1 x D	460	–	620	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	3	Ap1 max	0.1 x D	390	–	520	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045			
M	1	Ap1 max	0.1 x D	300	–	490	IPT	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039			
	2	Ap1 max	0.1 x D	200	–	260	IPT	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036			
K	1	Ap1 max	0.1 x D	390	–	490	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049			
	2	Ap1 max	0.1 x D	360	–	460	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045			
N	1	Ap1 max	0.1 x D	820	–	3250	IPT	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100			
	2	Ap1 max	0.1 x D	820	–	2450	IPT	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080			
	4	Ap1 max	0.1 x D	820	–	2450	IPT	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090			

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